What Is Claimed Is:

1. Apparatus for delivery of a bioactive substance within a vessel, the apparatus comprising:

an anchor expandable from a delivery configuration adapted for disposition within a delivery sheath, to a deployed configuration adapted for engagement of an interior surface of the vessel; and

a material comprising a bioactive substance, the material adapted to elute the bioactive substance into blood flowing through the anchor.

2. The apparatus of claim 1 further comprising a delivery sheath having proximal and distal ends, and a lumen extending therebetween, the anchor adapted for disposition within the lumen in the delivery configuration.

3. The apparatus of claim 2 further comprising an advancement device disposed within the delivery sheath lumen and extending proximal of a proximal end of the delivery sheath, the advancement device configured to expand the anchor from the delivery configuration to the deployed configuration.

4. The apparatus of claim 1 further comprising a retriever disposed within the delivery sheath lumen and extending proximal of a proximal end of the delivery sheath, the retriever configured to collapse the anchor from the deployed configuration to the delivery configuration.

5. The apparatus of claim 1, wherein the bioactive substance is chosen from the group consisting of gene therapy vectors, gene therapy sequences, and drugs.

6. The apparatus of claim 5, wherein the drugs are chosen from the group consisting of thrombolytics, anticoagulants, antiplatelet medications, antibiotics, and chemotherapy drugs.

7. The apparatus of claim 6, wherein the thrombolytics are chosen from the group consisting of tissue plasminogen activator, streptokinase, and urokinase.

8. The apparatus of claim 6, wherein the anti-coagulants are chosen from the group consisting of counadin, heparin, aspirin, and GP IIb-IIIa inhibitors.

9. The apparatus of claim 5, wherein the gene therapy vectors are adapted for incorporation into genome of a portion of blood cells with which the vectors come into contact.

10. The apparatus of claim 3, wherein the advancement device is chosen from the group consisting of a guide wire, a guide tube, and a pusher.

11. The apparatus of claim 3, wherein the advancement device is coupled to the proximal end of the anchor.

12. The apparatus of claim 11, wherein the anchor is collapsible back to the delivery configuration.

13. The apparatus of claim 1, wherein the anchor comprises a resiliently expandable cage.

14. The apparatus of claim 1, wherein the material is chosen from the group consisting of a spongy material, a floppy elongated member adapted for multiple turns, and a swellable pellet.

15. The apparatus of claim 1, wherein the material is coupled to the anchor by an extensible band.

16. The apparatus of claim 13, wherein the anchor comprises an extensible band to facilitate resilient expansion to the deployed configuration.

17. The apparatus of claim 1 further comprising a radiopaque feature.

18. A method of delivering a bioactive substance within a vessel, the method comprising:

providing apparatus comprising an anchor expandable from a delivery configuration to a deployed configuration, and a material adapted to elute a bioactive substance;

expanding the anchor to the deployed configuration within the vessel, the anchor engaging an interior wall of the vessel; and

eluting the bioactive substance from the material into blood flowing through the anchor.

19. The method of claim 18 further comprising, prior to expanding the anchor:

disposing the anchor in the delivery configuration within a distal end of a lumen of a delivery sheath; and

advancing the distal end of the delivery sheath to a delivery site within the vessel.

20. The method of claim 18, wherein eluting the bioactive substance comprises eluting a substance chosen from the group consisting of gene therapy vectors, gene therapy sequences, and drugs.

21. The method of claim 19, further comprising:

collapsing the anchor back to the delivery configuration within the distal end of the delivery sheath lumen; and

removing the apparatus from the patient's vessel.

22. The method of claim 19, further comprising, after expanding the anchor, removing the delivery sheath from the patient's vessel.

23. The method of claim 18, wherein providing apparatus comprising an anchor comprises providing a resiliently expandable cage.

24. The method of claim 18, wherein providing apparatus comprising a material eluting a bioactive

substance comprises providing a material chosen from the group consisting of a spongy material, a floppy elongated member adapted for multiple turns, and a swellable pellet.

25. The method of claim 22, further comprising:

readvancing the distal end of the delivery sheath to the delivery site within the vessel;

collapsing the anchor back to the delivery configuration within the distal end of the delivery sheath lumen; and

removing the apparatus from the patient's vessel.